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OPENING EXERCISES NEW YORK HOMŒOPATHIC MEDICAL COLLEGE AND FLOWER HOSPITAL,

October 4, 1910.

Address by the Dean, Royal S. Copeland, A. M., M. D.

We are very glad indeed to welcome our friends to-night, and particularly to extend greetings to the new students. I am happy to say that the number of new men entering this year is probably the largest in the history of the institution.

These have been strenuous days in the history of medical education. It used to be the custom for a committee of the American Institute of Homœopathy to examine the homœopathic institutions, but now we are examined not only by that committee, but by the Council or Committee of the American Medical Association, and more recently by the Carnegie Foundation for the Advancement of Teaching. It is the conclusion of the Carnegie Foundation that medical institutions are of no particular consequence unless they are largely endowed. I have noticed recently in the scientific world many remarkable and laughable discoveries. I find that a professor in the Chicago University has discovered that the brain is located in the feet. I have also discovered that some scientist in Nebraska has reached the remarkable conclusion that not only is the brain located in the feet, but that the seat of hearing is also in the feet, especially in grasshoppers. He placed a grasshopper on a board and tapped the board and the grasshopper immediately jumped off. Then, having observed that, he pulled the legs off the grasshopper and again placed him on the board and tapped it, but this time he did not jump off. Therefore he proved by induction and by deduction that grasshoppers hear through their feet.

I was disturbed this morning to read in the papers that some Mexican scientist has discovered a recipe for the manufacture of

chemical babies, and I have feared that this man in taking out a license to teach this method might fall under the ban of the Carnegie Foundation; but be that as it may, I rejoice to say that the Carnegie Foundation, through Dr. Flexner, gives our college the highest report of any homœopathic institution.

I congratulate the incoming Freshman Class upon the fact that we have entered upon a new era, or we hope we have, in the teaching of the laboratory branches. I regret to say that the trades unions were so inconsiderate as to go on strike just when we needed the services of the bricklayers, and we will not, therefore, be able to get into the new laboratory so soon as we had hoped, but it will be used by the Sophomores at the beginning of the second semester. There is so much rivalry in our scientific departments that we are having a very strenuous time in trying to restrain the heads of the departments, Professor Heitzman, Professor Jouard and Professor Ball, from actual physical combat in order to determine who shall have the better laboratory. I am happy to announce that matters have been so arranged that each one will have the best. This reminds me of a story of a man who had a clothing store, indeed there were three of them in a row. One morning this man went down to his store and found that the man on the left hand side of his store had placarded his store with notices of a receiver's sale, and the man on the other side had placarded his store with notices of a fire sale, and there they were doing all the business. He telephoned to a painter, and two hours later he had a sign over his door reading, "Main Entrance." So all the people came to him. So I suppose that each of these men will have that notice over his door. I congratulate you, gentlemen, that you are to have the increased facilities of these new laboratories.

Let us say a word of greeting to the new men. I am sure that these days are hard ones for you in a way. You have come from your homes to new associations. I assure you that you have come to a friendly place. There is a desire on the part of the faculty, trustees, alumni and all of us to give you a hearty greeting and to make you feel at home, and unless you do feel at home I think it will be your fault, for we are going to do our very best to give you a happy time and make your residence a pleasant and profitable one.

It gives me pleasure to introduce to you the President of our Board of Trustees, and to say on every occasion when I have the

opportunity that we are fortunate in having a body of laymen who so willingly give their time and sacrifice their own large interests for the sake of this institution and its work.

I am glad to introduce to you the Honorable Melbert B. Cary.

Address by Hon. Melbert B. Cary, President of the Board of Trustees.

Ladies and Gentlemen: I am sorry at the very beginning of my address to have to differ with our honored Dean upon a subject on which he ought to be better informed, but when he lends credence to the theory that grasshoppers and katydids think with their feet I must differ, and I can prove my contention. There was a party of ladies and gentlemen talking one day about the church choir, and in the party there was a very deaf lady. Of course, the choir were criticised in different ways, and in rather a strident tone, so that she heard everything that was said. Then the topic changed, and they began to discuss the katydids in the field, what a great noise they were making, and in a pause of the conversation this old lady said: Yes, and it is wonderful to think they all do it with their hind legs.

In my office near the Battery I often have word brought to me that some one wishes to see me in connection with the Flower Hospital or the Homœopathic College, and I always take the time to see any one who comes to see me from this hospital; they are never kept waiting. During the past two years I have had many young men come to speak with me about the college and to say they were coming here. One of them was sent by the President, Mr. Taft; another came from his workshop, saying that he wanted to come and get a medical education here, and we talked about the ways and means, and how he could do it by working at night and paying his expenses through the four years' course of this institution. Another young man came from the president of one of the banks down town, stating that this man, who was a married man, had been employed in his institution for some time, but that for the past six years he had been trying to get a medical education, and had been taking his courses one by one, first a year of medicine, then earning the money for another year of medicine. That man is now a graduate of this institution, and what is more, he has now a very satisfactory practice.

I am glad to welcome the new men to-night, and I want to tell

them that there are only two things we require of them. I always think about an incoming class in this institution in a very different way from a class entering the academic department in any of the colleges. May I quote as illustration two remarks made by President Taft's son at Harvard, where he has gone to take his law course. He said that he had given up society, athletics and everything, and was settling down to study, for he had gone to work. In an institution of this sort almost every one comes here with a purpose, and that is to work. They do not come here for athletics,—although we do not disapprove of athletics in their proper place,—but they come here to work, to prepare themselves for their chosen profession, and that is the one thing we want. In our large classes we have no room for drones. We want every man to be an earnest worker. There is no one in this institution who is not a worker, from our Dean down to the white horses in the stables. Every one here works; even the trustees of this institution work for it.

There is one other thing we want you to have for your own sakes. We want you to have what is sometimes called nerve,—but that word has many different possible definitions. You have all heard of the young midshipman who three evenings ago when the sailors were struggling in the water jumped in time and again and rescued twenty or more of them, two at a time. The Court of Inquiry said that he swam to four drowning men and got them all to the boat in safety, and he kept on until he was exhausted. That was grand! That was nerve! That was courage! That was splendid! but that is only one kind, and it is not the kind that appeals to me most strongly. I tell you, the kind of nerve that takes real strength is the kind that means patience and persistence as well. It may not get the Carnegie medal; it will not be exploited in the papers, but it is there all the same, and tells in the development of character. I tell you that today in this institution we have people who have that kind of courage and nerve, that kind of persistence, that kind of pluck. We have them all over. We have them in the training school for nurses; we have them in the young physicians; we have them in the students of four years who are plodding,—some of them with the greatest disadvantages,—with a single purpose to succeed, and to get there, and to make good; and we want every man of the incoming class to have that kind of nerve.

On behalf of the Board of Trustees, I am very glad to welcome you here. All of us here mean serious work for this institution, and we expect all of you to take the same attitude toward the institution that will be your Alma Mater after your graduation. I want to say that the Trustees of this institution will have an interest in the personal welfare of every one of you. You are all welcome to come and see me at any time that I can help you in any way. If you simply say that you are a student of this College, I will not keep you waiting.

Dean Copeland then introduced Professor John E. Wilson, with a message from the Faculty.

Address of John E. Wilson, A. B., M. D.

Some years ago I came across a book with the somewhat enigmatic title of "How To Be Happy, Though Married." Now I am going to leave that subject to you for personal solution in the future, and I hope that you will all try the experiment, and be brilliantly successful, but tonight I am going to try and point out to you how to be "Happy, Although a Doctor."

Although it may never have appealed to you as a concrete ideal that you were trying to plan a happy life, it is yet, consciously or unconsciously, the aim of every one in this room.

You students are divided into two fairly distinct groups. The first of these is made up of those who are so in love with the science or practical application of medicine that no other life presents any attractions. They are just as naturally born doctors as men are born poets or mechanics. It may be that the operation or limitation of scientific laws in their relation to the human body present to them a fascination to which all the other activities of the world seem poor. Their patients will never be more to them than cases, their own wives and children may have a meagre share of the comforts of life, but these men will be happy automatically, and grow more and more contented as the years go by. Others of this first class are really highly educated nurses. They love to be helpful to the afflicted. To dry the tears of a child, to relieve the distress of a sufferer, are to them a pleasure in the doing, and they find in the daily exercise of their skill a well-spring of pleasure which only grows deeper with the passage of the years.

With neither of these groups am I concerned tonight, for no

word of mine or yours can augment or diminish their perfect contentment with their lot.

The vast majority of medical students are comprised in the second of my arbitrary grouping. These men have recognized that they must earn an honorable and adequate living, and have selected medicine as the calling best suited to their tastes, or promising the best return for their exertions. Inherently this choice is the selection of an avenue to a happy life, for, as I have said before, this is our articulate or inarticulate ideal. Can it be attained in medicine and how shall one ensure its attainment? In order that a calling may ensure this, it must conform to three criteria. It must present adequate pecuniary rewards; the work must be worth the doing; and the exercise of it must be interesting. Happy is that man who can follow his bent without regard to its remuneration, but most of us must first earn the living before we can develop any definite scheme of how that life shall be lived. Bread, butter, and shelter are pre-requisites, and must occupy a great deal of our attention. Now no one can reasonably expect wealth, according to present standards, from the practice of medicine, and I doubt if many of you based your choice very largely on that probability. On the other hand, I know of no calling or profession which promises a greater certainty of a comfortable livelihood and the possibility, with thrift, of suitable provision for old age. Speaking from a considerable knowledge, I can say that I do not know of a graduate of this college who has satisfied the ordinary requirements for success in any business or profession who has failed to make a creditable showing in a financial way in this profession. There are abundant failures in medicine as in every other walk in life, but possessed of knowledge of the particular instance in question we are almost always inclined to agree with the conclusions expressed in the verdict of a coroner's jury which sat upon the body of a gambler who died suddenly on having been discovered with five aces in his hand? "Holding the views on cards which he did it is a wonder that he lived as long as he did." This whole matter was well summed up by the late Timothy F. Allen, who once said to a recent graduate: "If you go into the profession to make money you may do it and you may fail, but if you try to make of yourself as good a doctor as you can you will make a mighty good one and you will have all the money that you need without worrying about that end of the profession."

Is the work one which is worth doing? I am not here to fill the air with words concerning a self-evident proposition. It isn't a business; it hasn't been made a business and it never will be. Doctors are often taunted with being poor business men when they never pretended to be anything of the kind in their work. There is no other human activity where the element of bargaining is not recognized as proper and right, but the doctor never hears the call of distress that he does not universally risk comfort, health and at times life itself to relieve his fellow in distress, and then if he does attempt to play the business man it is when the agony of their extremity has often grown somewhat dim in the memories of the patient. Here at this point is the very kernel of your heart's desire. Search your own experience and turn from that to the history of the world and you will find that earth has from its very foundation held no such fountain of pleasure as the consciousness of having done a worthy task and to have done it well. Remember the first money you earned, the game you won, the fish you caught, the deer you shot or the race that you ran and each victory, important at the time and worth honest endeavor, made you for the time exultantly happy whether skies were bright or you were drenched with rain, whether you were warm or cold or rich or poor. I have seen the sparkling eyes and the radiant smile of the country lad who had invented a simple enough corn-planter, but one which would do the work of five men, and witnessed the exultation of a financier who had successfully rescued a great corporation from ruin. A complete happiness came to both which no gap in the character of the achievement was wide enough to throw a shadow of difference over their exultation. They had each given the best that was in them and practically consecrated themselves for the time on the altar of men's needs and the honesty of their devotion glorified their achievement. It reminds me of that pathetic little story of the Juggler of Paris.

There was once a juggler who had been entertaining all France with his skill. He juggled at fairs, in villages and in the halls of the nobles, and no face was so merry and to none did money come more easily or go from more lightly. He led this wandering life for a long time, but finally without a penny in his pouch nor food in his wallet he was crossing a barren plain toward nightfall after a day of bitter cold. He overtook a monk who was going to his

monastery and he labored with the juggler to show him the error of his life, and oppressed by his want and the weariness of his life he resolved to leave the road and finally became a monk, and the convent walls closed about him. He sought peace and a happy life in holy living, but instead of peace his soul was filled with despair, for all about him he saw the monks joyful from being able to exalt the honor of the convent and the Virgin by the exercise of their talents. One painted the faces of the saints, another illuminated holy books, while others sang or made the chapel services glorious with the music of their instruments, while he could do none of these things, and, more than that, he was so ignorant that he could not even repeat the prayers. So time went on and he became more and more melancholy in his inability to do anything to the honor of the Virgin, for his heart was full of devotion. Finally one night the monks were startled by hearing strange sounds before a figure of the Virgin in one of the alcoves and they went in a frightened crowd to see what it might be. They were scandalized at what met their eyes. There before the shrine the former juggler had spread his little carpet and lying on the floor was his monkish robe, while he in his spangled tights was going through, one after the other, his old tricks of jugglery and feats of strength. Now and again he would call the Virgin to note the art of this or the agility of that, while the horror of the monks rose to an almost uncontrollable height. Just as they were about to rush in and punish the profaner of the sanctuary as he sank down panting before the sacred image they seemed to see a form stoop down and touch his forehead and the odor of lilies filled the air, and they stole back to their cells, knowing that the sincerity of the offering had sanctified the incongruity of its form.

Now devoted struggle for the relief of suffering is to be your daily experience, and all that is demanded to ensure happiness in such a life is to give to your patients the best that is in you and the best that the art of medicine has placed in your hands. That leads me to digression into another phase of this subject. You deal not with stone and iron, with inorganic things, but with that most precious of all things, human life. About its healthy and its pathological conditions, its structures and tissues men have acquired much knowledge and some knowledge of that you must have or your touch will be that of death and not of healing. All the fidelity

and devotion in your ministrations will not compensate for ignorance of the conditions and of the means of correcting them. Here is the drill-ground, there is the battle-field, the real importance of each must be recognized in order that you may have your reward. Every time a doctor approaches a case he takes his reputation along with him. He cannot take the one and leave the other. The test is a daily one and what you do here will have no small bearing on the last feature of a pleasant profession, viz., that the practice of a calling must be an interesting one. How great a factor this is in making or marring a life is very familiar to those of us who have had experience in the profession. When we are confronted with the task of finding employment for those whose circumstances have not forced them into any form of serious activity, in many cases it is impossible to find anything which will occupy their time, and if we are successful it is only for a time and we fail to perceive the results for which we hoped. They do not need the financial results of their labor, nor the things which they make, and we find that interest in a calling is a more complex matter than we had supposed. Now you will probably need the financial returns, and that will lighten many a long drive and trying hour, but when with increasing prestige the need may become less and the hardship more irksome and you see men of your age and relative ability possessed of more wealth and far more leisure how are you to avoid the conclusion that you made a mistake years ago, now long past the time for remedy? There are two remedies, one of which while true persuades no one and the other will persuade any one who has tried it. The first argument is that you are looking only at the ten thousandth person and if you had gone into such a calling there would have been a preponderating chance that you would have been one of those men whose life is a constant struggle to live reasonably well and still keep their heads above water, but you won't believe that. The second argument comes home to any one who has not commercialized his profession. I once sat in a gathering of exceptionally successful medical men. One of them began to curse the day that he had ever studied medicine and said that he could have been a millionaire by this time with less struggle than he had put forth. This was agreed to by one other man and then the subject was dropped. Those two men had all their professional lives been conspicuously commercial and had both gained a very

considerable fortune, but they were miserable because they hadn't more. Whether you will end with heart-burning or peaceful content lies largely in the whether you have a great big human heart which grows in tenderness with the years and which gets such great reward from every kindness done that finally it becomes like one of the saints of the church who had so much sanctity that it was not only sufficient for their own salvation but also had over and above a great store which could be drawn upon to assist in the salvation of sinners through all time. On the other hand, for the more earthly type of man there is an endless fund of contentment in one's personal development in the art of healing. Its possibility lies in whether to you medicine shall mean certain rubrics and formulæ or whether each case is a fresh field for deduction and analysis. A man may be crammed to the neck with formulæ and be a successful doctor. He may make the lame to walk and give sight to the blind, and with all his success the time will come when his daily life will be but a monotonous round of stale repetition. The physician who is always developing will find his calling grow in interest as he grows in knowledge and experience, and the case which was commonplace in his salad days will bristle with interest to his enlightened eyes.

I abjure you then to realize that application while you are here not only will rob the Regents of their reputed hoofs and horns, but practically will insure what knowingly or ignorantly is every one's heart's desire, a happy life. Some may say that "this is all very fine, a sort of ethical luxury; but I want money, and all that it will bring." Can those men tell you any better road to pecuniary success than the reputation of being the best physician in a town? What I have urged tends to make you that, and a joy in your work in your struggle for recognition is one of the best methods of making a physician gracious and engaging in manner.

AUTOGENOUS VIRUS IN THE TREATMENT OF SEPSIS.*

By Charles H. Duncan, M. D., New York City.

This paper is a record of experiments performed by the writer in the treatment of sepsis, together with deductions that this new treatment suggests.

This treatment of sepsis consists of administering pus taken from the wound of the patient to the patient by the mouth.

At a meeting of the county medical society some months ago Dr. Laidlaw reported an apparently hopeless case of pneumonia that he cured by a method that appeared extremely radical. The recovery was unmistakably due to his method of treatment, and impressed the writer to such an extent that he decided to keep it in mind in other similar conditions. Dr. Laidlaw withdrew fluid from the lung of a pneumonia patient and injected it just as it was hypodermically. He reports the change that came over the patient in twenty-four hours was remarkable—in forty-eight hours he was out of danger. This is Isotherapy, pure and simple. The principle of Isotherapy is the principle of vaccine therapy.

Vaccine therapy is of peculiar interest to homœopathic physicians, more so, in fact, than the serum or anti-toxin therapy.

The principle of vaccine therapy was introduced and incorporated in homœopathy in the year 1823. At this time Doctors Hering and Lux taught that the virus formed in the body was capable of curing the very disease that gave rise to it. This was but stating in a few words another form of giving medicine known as isotherapy.

"Isotherapy is giving the products of disease for the disease itself, thus administering the same thing in *attenuated* form." The older writings of the isotherapeutists made no mention of having experimented with pus, for they considered pus as a physiological factor or as necessary for proper wound healing. Neither did they mention that the agent should be auto-genic.

It is extremely gratifying to homœopathic physicians to feel that the teaching of our earlier investigators has been confirmed in these later days by Pasteur and Koch; and, later, by other investigators, as Wright, Douglas, etc., etc. These men, as might well be supposed,

*Read before the Homœopathic Medical Society of the County of New York, October 13, 1910.

knew nothing of the homœopathic law of similars, for in the reports of the cases they cured by administering vaccines they gave no credit to homœopathy. However we, as physicians, in a broad sense of the term, will forego the discussion as to who first discovered the value of administering vaccines, and rejoice that it is at last accepted by the old school. We go further and welcome the results of their investigations along this line to a large extent, because they confirm the clinical observations we made nearly a century ago, and which homœopaths do not question. We, as homœopathic physicians, are deeply indebted to Messrs. Wright and Douglas, in that they were able to accomplish what we, as homœopathic physicians, were never able to, in that they have proven our law of similars very exactly, but we would be under still more obligations to them if they would acknowledge what we feel they must know by this time that their cures were homœopathic and nothing less.

Wright and Douglas lay down the following four general principles for treating cases of bacterial infection:

1. "Isolate in pure culture the causative micro-organism." I wish to lay particular stress on this first principle. It is that *vaccine* or *nosodes* must be *autogenous*.

2. "Estimate the opsonic power of the patient's blood to this micro-organism." This we have never been able to do, but we knew the law more than a century ago.

3. "If the opsonic index be at or below normal, prepare and standardize a vaccine from this micro-organism." With their instruments of precision and skill they were able to estimate with a considerable degree of accuracy just exactly what we have always wanted to know.

4. Inoculate the patient with this vaccine in *appropriate doses* and at *proper intervals*, as shown by a systematic estimation of the opsonic contents of the patient's blood." They go further and tell us the "*Vaccinations should never be given during the negative phase*. As a result the patient's tissues are stimulated to an unusual production of anti-bodies in the serum, phagocytosis is increased, and the invading bacteria are disposed of, and the patient recovers from his infection." This is all homœopathy.

This is all homœopathy, homœopathy in every detail, as pertains to our nosodes except they have gone farther and told us our nosodes should be autogenous.

In the treatment of sepsis, if this were to end the whole matter, it would fall far short of being of practical value. It is a beautiful biological demonstration and served its purpose by proving our law of cure, and now comes homœopathy—we know we obtain cures by giving these vaccines or nosodes *by the mouth*.

The writer combines these two theories and gives the living *autogenous vaccines by the mouth*.

By this method we place in the body the autogenous vaccine (Wright and Douglas) by the mouth (homœopathy).

This short cut obviates the laborious and costly proceedings of Wright and Douglas and insures the patient of getting an autogenous vaccine, according to a law of cure.

CASE I.—June 1st, 1910. J. V., male, aged 42 years. About two months previous, the patient received a compound fracture of the left leg, middle third. Severe bruises with no abrasions over the right leg. The wound was infected. The patient was anæsthetized, the wound opened and thoroughly drained. On about June 3d the patient complained of severe pains in the right leg, the calf was very much swollen, hard, the skin tense, no fluctuation.

June 3d or 4th. Marked fluctuation; the right leg was opened under anæsthesia and a pint or more of pus evacuated; two rubber drains were inserted in the right leg and the pus pockets thoroughly broken up. Both limbs were in bad shape. Patient's temperature dropped from 104 after this evacuation, but climbed up steadily again to the same temperature.

June 5th, 6th, 7th. The patient was given 40,000,000 streptococcus pyogenes stock vaccine hypodermically, with no appreciable result. The patient was losing flesh rapidly, becoming markedly septic. Skin ashen-colored, he was evidently absorbing pus. June 12th. the patient was given an autogenous vaccine prepared at the Sydenham laboratory with no results. The left leg became so bad that it was deemed advisable, on June 22d, to amputate it above the knee. In view of all the pus surroundings, it was remarkable that it healed by first intention. However, the right leg seemed to exude to an alarming extent. At every dressing, the pus had soaked through the gauze, cotton and bandages at the four drains.

June 27. As the patient was evidently going bad, the writer remembering the experience of Dr. Laidlaw in administering unsterilized bacteria in the case of pneumonia, decided to use heroic

measures in this case. He gave instructions that at the next dressing, one drop of the patient's own pus be placed on a lump of sugar and given to him by the mouth, and that this should be repeated for three consecutive days. It was reported to him by the house doctor that after the administration of the third dose the patient became alarmingly worse and nearly died. Hot water bottles, oxygen and adrenalin chloride were used. This was the negative phase, or an aggravation of the disease. After this, he became rapidly better in every way, and in five days' time there was only about half an ounce of pus on all the drains together. Interest as to just what was the nature of the infection caused the writer to send a sample of the pus to the pathologist to grow culture and positively determine the cocci. Dr. Higgins reports the infection was streptococci and staphylococci alba. In seven days' time from the administering of this autogenous, or live bacteria agent by the mouth, there was no discharge of pus whatever from the wound. The gauze was stained only by the secretions that even a healthy wound would give. The patient subsequently died from another condition.

The success of this method of treating infected wounds encouraged the writer to go further. There is nothing in medical literature that he has ever observed that would justify administering this therapeutic agent in this manner. When it was administered the case was practically hopeless, an emergency case pure and simple. The possibility of infecting the alimentary canal was reviewed, but the known ability of the secretions of the stomach to take care of bacteria was depended on to check infection in this locality.

CASE II.—June 1. J. W. came under my hospital service suffering with a compound complicated fracture of the left leg. The wound was septic, the leg inflamed, several of the stitches had pulled out. The history of the case, as it came to the writer, was that about eight days previous the patient had fallen from a window and received the injuries aforementioned. When first seen by the writer on June 1 the wound was opened and a piece of bone an inch and a half long, wedge-shaped, was found to be loose in the wound, and was removed. This piece of bone included part of the articulation of the knee. The wound was drained through to the under side of the knee by two rubber drains. The patient's temperature fell from 105 and he was apparently getting along fairly well, that is, there

was still pus in the wound, but it appeared to be draining freely, when a very large swelling of the thigh was noticed—the whole thigh and gluteal region were involved. This patient was of a phlegmatic disposition and never complained—just the opposite to Case I., who complained bitterly all the time, kept the ward awake the greater part of every night and screamed at every dressing.

About June 7, the swelling on the thigh was opened. At a conservative estimate, a quart of pus was evacuated. The old drains below the knee were still discharging quantities of pus. The wound above the knee was drained by three rubber tube drains. The patient felt somewhat better after the evacuations of the pus, but his temperature still ranged from 103 to 105. He coughed a great deal and spit up large quantities of thick, green phlegm. In fact, the case looked like so many others that we see in hospital practice where an injury of this kind lights up an old latent pulmonary tuberculosis. He had an evening rise of temperature, and was profoundly septic.

This case, as Case No. I. above, was about the worst of its kind the writer had ever seen. The patient had frequent chills and it was a question as to just where to look for the pus that was causing these chills, as the whole leg and thigh were exuding pus. The patient was doing so poorly that he was taken to the operating room for the purpose of amputating the leg. He spoke little or no English and when the nature of the operation was explained to him he refused. It was only then the writer decided in this case also to perform the experiment of giving the patient as a therapeutic measure one drop of his own pus every day for three days in succession. As gratifying and as astonishing as it may appear, in seven days from the date of the first administration of this autogenous agent by the mouth the wound was free from pus, the patient's temperature normal and he wanted to leave the hospital, saying he was no longer sick.

This patient will have to be operated again, for when he was given anæsthesia for the purpose of opening pus pockets it was discovered that the ends of the bones did not meet by about three-quarters of an inch, and that they were covered with tissue. But as far as pus was concerned the wound was absolutely clean and was healing by granulation. Coincident with the clearing up of the pus all the other symptoms ceased or were ameliorated.

CASE III.—June 28. F. W. T., male, aged 45, came to my office suffering with an abscess of the left gluteal region. A large part of the gluteal region was inflamed, hard, tender and swollen; temperature 101. Patient had been attempting to attend to business, although he complained of being sick and scarcely able to walk on the day following. Under local anæsthesia, the swelling was opened and about three ounces of pus evacuated. The patient was given one drop of pus on a lump of sugar by the mouth and given two other lumps to be taken the two following mornings. In three days' time the wound had healed to such an extent that the rubber tubing was removed and a gauze drain inserted. In seven days' time the wound was clean.

CASE IV.—July 1. N. F., aged 24, occupation, printer; reported at the office with a good-sized boil on the right thigh. It was opened and treated in the manner described above, in Cases I., II., III. He was given one drop of his own pus on a lump of sugar for three consecutive days. At the end of five days the wound was clean.

CASE V.—L. W., aged 32, occupation, electrician. In pounding a screw-driver with the palm of his hand, it bruised the flesh in the palmer surface of the thumb. He reported at the office June 30th. The swelling was lanced and about half a dram of pus evacuated. The wound was drained with gauze. The patient given one drop of his own pus on a lump of sugar every day for three days. In four days' time the drain was removed, and the patient has not been seen since. On this date the wound was practically clean.

CASE VI.—M. H., female, aged 28. June 28 reported at the office suffering with acne. She had suffered with this as far back as she could remember. A peculiarity of this case was, that the only parts of her body that were not affected were her face, hands and feet. On the other parts of her body the old acne scars were so thick as to cause her skin in every part to be extremely roughened. She said she had done everything for it.

A number of these pustules were opened over the back and chest and the contents of two or three pustules was collected on each one of three lumps of sugar. The excuse given for collecting them this way was that it was done for the purpose of examining it under the microscope.

On June 29 these lumps of sugar were roughly broken up into three powders. She was given one powder every morning for three

consecutive mornings. When seen three days afterwards the pustules that were practically ready to burst at the time of her first visit were drying up and no new ones had made their appearance. The red discoloration around many others were fading.

July 4th. There were no pustules over her entire body, and the red discoloration was fast disappearing.

CASE VII.—J. M., aged 36, a painter, fell from a ladder and received a compound fracture of the lower jaw. When seen by the writer some four months later there was a sinus or fistula discharging pus about an inch from the seat of the old fracture. The wound was clensed, curetted and drained and a Biers' suction treatment instituted. The patient was cachectic, no appetite, tongue furred and the wound refused to heal after four weeks' treatment when autogenic vaccine was given by the mouth. The discharge ceased in three or four days, his appetite improved so he could eat anything, and he was better in every way, but the pus appeared again; in about eight days he was given another dose with the results as before. Still the pus came back two or three days after the wound would cease discharging. An operation was advised and a piece of bent silver wire about two inches long removed, when the wound healed quickly. I speak of this case to show the improvement that set in even when there was a foreign body in the tissues.

CASE VIII.—Dr. Freeman reports the following case: Patient came to him with a carbuncle on the index finger of her right hand. The patient was a delicate woman and had been delicate since the first child was born. The finger and hand was swollen to large proportions, very tender, painful and the forearm was swollen and the glands in the axilla were involved. Temperature 103. The lymphatics were streaked up past the elbow. Dr. Freeman said Arsenicum seemed indicated, but was given without results. Then Lachesis was given without results, then Mercury was given with no benefit. I neglected to say he had opened the hand freely at the first visit, but still the infection and swelling increased. He then took one drop of pus from the wound and triturated with sugar of milk and placed it on her tongue. In six hours there was an improvement, in that the pain had ceased. In twenty-four hours the red line marking the lymphatics had disappeared and the wound had taken on a healthy appearance; the temperature had dropped to 99 degrees. On the day following healthy granulations had made their appearance. The

whole septic condition disappeared in sixty hours bearing healthy granulations. The wound was free from pus and she made an uneventful recovery. Since then, two months now, she said she was enjoying better health than ever before.

CASE IX.—Dr. W. H. Freeman reports a stubborn case of *acne vulgaris* cured promptly by giving autogenous vaccine or pus by the mouth. The method he employed was imilar to that described above. At the suggestion of the writer, he placed the contents of several acne pustules in a small quantity of alcohol and gave the mixture of alcohol and pus by the mouth.

This is the method the writer formerly used in curing many cases of infection during the past two years not recorded in this paper. However, his experience has convinced him that the results are better in every way if the live bacteria are given in the manner described above.

CASE X.—This case is still in the hospital.

H. L., aged 34. Admitted to hospital February 26, 1910. Weight, 205 pounds; suffering with a compound fracture of the left humerus, upper third, fracture of the surgical neck of the left femur. February 27 patient operated, wound cleaned, drained and put up in plaster cast. The wound was infected. March 8, operated, opened and cleaned. Non-union of bone. March 26, Biers' hypodermic treatment begun. Esmarc bandage applied four hours out of twelve every day. This was continued till July 10, when the patient was again operated. A silver plate was put in to hold the bones in apposition. September 15, plate taken out. September 22, the patient came under the writer's medical supervision at his special request, to see what effect his autogenous vaccine would have. On September 22, the patient was cachetic, lips inclined to be a light shade of purple, furred tongue, wound discharging pus for seven months continually, that is, ever since two days after the accident. He was melancholy, wanted to die, would not eat, was emaciated, weight, 128 pounds; would not leave his bed, altogether he was in bad condition. The patient had had red bone marrow, Biers' hypodermic treatment, liquid peptonoids and homœopathic medication. There is a history of members of his father's family having died of tuberculosis, his eyes were sunken and he was considered a hopeless case.

September 22. He was given one drop of pus taken from his

wound and placed on a lump of granulated sugar. This was repeated on September 23 and 24. On September 25 there was markedly less discharge. September 26 there was none, the wound was clean. September 27, wound clean, same 28th and 29th, but on October 1st there was a slight discharge. He was given another dose made fresh from the wound. October 2, slight discharge. October 3, patient complained of not getting enough to eat, patient had gained six pounds. Slight discharge on October 4th and 5th; for the first time since he came under my charge, the patient got out of bed of his own volition. Slight discharge of pus up to the 9th, when the wound was clean and has been ever since. October 12th, the patient gained ten pounds, was put on house diet, smiled for the first time, although the nurse said he had been cheerful for almost a week.* He has had no other treatment besides this and his wound has been dressed with only sterile water and gauze.

Since administering this therapeutic agent, coincides with or is analogous with the principles of isotherapy and is used in homœopathy according to the law of cure, there is much in this connection of which we, as a school, can speak with authority. It should be given as any other homœopathic remedy. A physician can give either a large or small dose according to the law of similars, and still be a homœopathic physician.

There is no subject in medicine where there is as great a difference of opinion as the subject of dosage. And in this comparatively new field of vaccine therapy it is a subject of which we know but little.

I have endeavored to obtain an aggravation in some of my milder cases by giving ten drops of pus by the mouth and have obtained no aggravations. I have succeeded, however, in others, and it was very annoying to the patient at the time, none but case No. 1 was serious. Case No. 1 was very weak and he had an aggravation by giving one drop of pus daily for three days. Do not be afraid, give it, give it in big doses and you certainly will get results, either aggravations or ameliorations; when either set in stop. There must always be a certain period of time elapse after giving medicine according to our method, and giving this virus by the mouth I find to be no exception in this regard.

*October 24, patient gained fourteen pounds, this makes fourteen pounds in thirty days.

If it is necessary to repeat the dose and it will frequently be in bad cases, increase the dose, if you should get an aggravation. [I have not found it troublesome except in serious cases.] Hail it with delight, then simply wait patiently till the amelioration sets in and the patient recovers. When an aggravation is obtained the patient will tell you the medicine made him sick. The wound pains, patient is sleepless. Some vomit, others complain of headache, etc., etc. The method the writer would suggest is to triturate one drop of pus with two drams of sugar of milk for ten minutes; give this as a dose, in twenty-four hours give another, and in twenty-four hours give another till three are given, then wait before giving more.

If improvement sets in at any time do not give any more till improvement ceases, when a fresh supply of from two to five drops is made up from the wound and given as before. Give it as soon as made, always taking a fresh supply from the wound as it is needed.

I have seldom found a very much larger dose gives a troublesome aggravation except where the patient was very weak. The length of time before another is given necessarily varies with the individual.

If the best results are to be obtained the patient should be watched carefully. Usually it is very quick acting; you can see results in twenty-four hours.

The writer would like to hear of the reports of others along this line for he fully believes that in administering the vaccines in this manner he has discovered a method of curing infection that is within the reach of every one.

It may be that there are limitations to this method of administering vaccines, and there probably are. But here are a number of severe cases that have been cured by administering pus by the mouth.

We are told by investigators in biological laboratories the vaccines should be given early and stress is always laid on the fact that they should be given early. I will not question this statement, but I will state that the most startling results I have obtained have been with chronic cases.

When using autogenic virus, the treatment the patients received was the same in each case. I always endeavored to establish free drainage, kept their bowels open with enemas, and dressed the wound when needed with only sterile water and gauze.

Questions may arise in patients suffering from tuberculosis, tonsillitis, diphtheria, etc., why do they not cure themselves? Wright

and Douglas, our old friends, the isotherapeutists and we homœopathic physicians, in fact, every one who has given medicines according to the law of cure, all agree that medicines should not be given during the negative phase or during an aggravation. Hahnemann says it may kill the patient. The writer believes the patient is in a negative phase during the disease is the reason they do not recover by themselves.

Deductions.*

It is a new method of curing bacterial infections, also the oldest, as it is nature's method.

It is the simplest known method of curing bacterial infections.

This method of curing infections is within the reach of every one, physicians and laity alike.

It is according to the homœopathic law, but embraces the autogenous feature that homœopaths have failed to recognize.

It is the result of engrafting the autogenous principle of Wright and Douglas onto homœopathic principles. It is, as it were, the legitimate offspring of homœopathy, the mother, and opsonotherapy, the father. We find in the offspring a new being resembling both father and mother, and with pronounced characteristics of one of its ancestors, isotherapy.

By this we have at last found a plane on which the homœopathic school of medicine and the old school of medicine may meet on a common level.

This method of treating sepsis opens up an entirely new, verdant field of thought pregnant with promise and possibilities.

Patients suffering with wound [streptococcus and staphylococcus] infections carry the specific for the infections with them in the form that it can be administered more conveniently and cheaply than in any other way.

It will simplify the treatment of many diseases as ferunculosis, abscesses, adenitis, acne, sepsis, etc., etc., and many others.

233 Lexington Ave., N. Y. City.

DISCUSSION.

DR. LAIDLAW: When we throw a new thought into the medical pool, we never know where the ripples are going to stop. When I presented that case of pneumonia three months ago, I had no idea

*These deductions were made since the reading of the paper.

that the principles would be applied so soon to these serious cases of sepsis. In giving that drop of pus by the mouth, Dr. Duncan has scored one on me. I tried to eliminate the bacteriologist with his incubator and culture tubes and substitute the hypodermic syringe. Dr. Duncan has cut out the hypodermic syringe.

Dr. Duncan's work throws new light on the common observation of a dog licking his sore foot. We used to think that he was employing the healing action of the saliva or doing it simply for cleanliness. Dr. Duncan shows us that he was giving himself a dose of autogenous vaccine.

When the doctor first presented this matter to me some weeks ago, it seemed incredible. It seemed particularly nasty. The idea of giving a patient, by the mouth, a drop of his own pus on a lump of sugar is rather revolting; and yet, as I came to think about it, I saw that it was the logical conclusion of bacteriology applied to therapeutics. It is the logical conclusion of the work of Hahnemann and of Pasteur and Koch and Wright with his vaccines. It is merely one step forward in the regular development of bacteriological therapeutics.

Consider the genealogy of this idea. It is certainly a new treatment, but every idea in medicine however new has its roots reaching far back in the past. The basis of this idea is the old, primitive and popular superstition that every disease carries with it its own remedy. This appears in many forms as in popular belief that the liver of the snake that bit you is a sure antidote for the bite; that the hair of a mad dog is the cure for its bite. Perhaps this is only an expression of our primitive sense of eternal justice that where there is a wrong there should be a remedy and we believe so strongly that there should be a remedy that we come to the belief that there is one. Guided by this instinct, many savage and primitive people have developed methods of inoculation long before Jenner and cow-pox vaccination. Then comes Hahnemann with his law of similars, not the poison of the disease to cure the disease, but a vegetable, animal or mineral poison, producing similar symptoms. Then, in 1833, comes Lux with his isotherapy. Lux was a homœopathic horse doctor and I believe that all modern historians credit him with reviving, in modern times, the idea that every contagious disease has in its discharge the remedy for its cure. This isopathic theory of Lux was taken up by Hering rather than by Hahnemann. Hahnemann looked rather askance at this modification of his pet law of similars. This was but natural. No one likes to have his pet idea modified and improved by another. The idea of turning his law of similars into isotherapy was most objectionable to Hahnemann and he would have little to do with the disease products or nosodes. Then came Pasteur and the bacteriologists, their discovery that many diseases were due to infecting microbes and their efforts in

the laboratory to cure diseases by these microbes and their products. On the basis of bacteriology, Prof. Wright developed his treatment by dead bacteria or vaccines. Following Wright, I tried to cure pneumonia and meningitis with their living virus, administered hypodermically. Following me, Dr. Duncan applied the living virus by the mouth. You will see then that while this treatment is new it is not a wild experiment, but is the logical development of an idea that has been germinating in medicine for a thousand years. I believe that we cannot justly reject it as ridiculous or nasty but must give it respectful consideration. The question presents itself as to why the homœopaths who adopted isopathy and used the nosodes did not long ago give the patient a drop of his own pus to cure purulent infection. There are two reasons for this. One is that they did not recognize suppurating conditions as infectious and the other that the principle of the autogenous vaccine or the necessity of using the same variety of infection that afflicts the patient is the development of bacteriology in recent times.

I believe I am correct in stating that the isopaths with their nosodes did not have this idea of the necessity of autogenous vaccines. As I remember the practice of my isopathic friends, when they used a nosode, medorrhinum or syphilinum or scarlatinum, they did not take the remedy from the patient's own effluvium, but used the stock bottles in their medicine cases. The idea that infectious diseases are cured not only by administering the dead microbes that cause the disease, but that particular variety of microbes causing that particular disease is entirely the development of bacteriological therapeutics.

The other reason why the isopaths did not use pus as a remedy is that they did not recognize pus as infectious. That idea only entered medicine very slowly with the work of Lister in 1871 and was not generally accepted in the medical profession until within the last twenty years. Many of us here have heard the elder Helmuth contrast the old days with the new in regard to pus. In his day the surgeon would come to the hospital and inquire for the patient whose leg had been amputated a few days before. The house physician would report, "The wound is suppurating nicely." In these days the surgeon inquires for his amputations and when he hears that there is a drop of pus in a stitch hole, he says, "What could have been the matter with my technique?"

In this question of curing sepsis by administering pus by the mouth, we should not be carried away by novelty or plausibility. Most of us have practiced long enough to see many sure cures vaunted for a few months only to be thrown aside as worthless and we are justly skeptical of new treatments that claim to make what seem to be impossible cures. I was skeptical of this one myself, but when I came to reflect on the reasonableness of it, how it was

logically the next step in the development of bacteriological therapeutics, I realized that it was entitled to a respectful hearing. Since the doctor mentioned it to me a month ago, I have not tried it and I do not think that I myself would care to take a drop of my own pus on a lump of sugar, but I think it is well worth trying in severe cases. This is not a treatment to apply to every case indiscriminately, not to the cases that are doing well and progressing normally, but for the severe cases,—and you surgeons have them every now and then,—of persistent suppuration which resists the ordinary and more tasty methods of treatment, I would have no hesitancy of applying this principle.

I wish to congratulate Dr. Duncan on the clearness of his demonstration and to express a hope that he will be sharply criticised. A strong man's enemies do him more good than his friends. His friends flatter him and never tell him the truth. His enemies show him his weak point and force him to work harder than ever to improve his work so that it will stand criticism. And so I would recommend you gray-headed surgeons here who hesitate to take up these new fangled and not over-appetizing treatments to criticise him as hard as you can for his own good.

DR. FOBES: I am not old or gray-headed yet, but when this proposition was first put up to me by Dr. Duncan I felt that I could not wish my worst enemy anything worse than giving him his own pus, but as the doctor brought out his theory it appealed to me. I felt about it much as Dr. Laidlaw does. I used the toxins, then the serums, then the stock vaccines—given hypodermically. There is one point I should like to make—that is, the dosage. I think we ought to go slowly in this matter. I should not feel inclined to give a patient a dose of ten drops of pus; I should prefer to give him a dose and wait to see the effect, and not to give him such a large amount at once for fear of producing an aggravation, and losing the patient. I should also like to know if the doctor has had any failures. We sometimes learn a great deal by our failures. If he has had failures, I should like to know his explanation of the reasons.

DR. MOFFAT (Brooklyn): The doctor has presented his subject very clearly, indeed, and I have listened to his paper with much interest. I do not think he has yet made a thorough demonstratoion, but he seems to be approaching it. He has not given us any history of the temperature of these cases. I should like to know what he thinks about one patient, starting on a larger dose than another. It is only human nature to ask: Why? and it is important to know why a patient is apparently improving in consequence of this treatment. It seems reasonable, as Dr. Laidlaw has put into the blood of his patient fresh cells with the idea of their being regarded as reinforcing the antibody; but is the stomach the same thing? Does the stomach digest pus?

Did I understand the doctor to say that pus contains practically no bacteria? Can we follow a drop beyond the stomach? Do we imagine that it is a toxin, or one or more of the bacteria that have escaped digestion in the stomach, and their being absorbed? Of course, this is all new, and no one really knows. Probably some have studied the subject closer than I, and can study it a little more intelligently.

DR. HASBROUCK (Dobbs' Ferry): I think the objection to the nastiness of the dose can hardly obtain among a body of physicians who have been using antitoxin, which not only contains the dirty bacteria, but have been using vaccine, which is certainly a nasty thing. The antitoxin is certainly as bad as the pus, for it has been improved or made worse by passing it through the horse. I would rather take my own poison than an antitoxin which has been passed through an old horse.

DR. RABE: The paper is an extremely interesting one, and has raised several very interesting questions: First of all, is this a matter of isotherapy? Second, does it operate along the lines of or in accordance with the law of similars? and what would be the effect if it were potentized according to the decimal scale and administered accordingly? Certainly, the action appears to be homœopathic in some of the cases reported. On the other hand, similar cases have been cured by Lachesis, Pyrogen, etc. I have seen cases cured with ten drops of Pyrogen. Dr. Helmuth said that Pyrogen was made from decomposed meat. I have more than once been disappointed in Pyrogen. I have seen one or two patients die where I have prescribed it to the best of my ability. There is a question as to whether it is really and truly according to the doctrine of similars, and that is an all important point for us as homœopaths.

DR. CHARLES H. YOUNG: I would like to call attention to a foot note written by Dr. ———, which most of you have probably read. In explaining the law of similars he said that disease is produced in a subversive force; that when that subversive force is in the system, it produces the symptoms manifested when this same subversive force appears in nature and produces a plant poison, or what not. When we take the plant in nature it produces in the system the same symptoms; so when you give the remedy to a disease you give the identical force in another direction. So, according to that explanation, the giving of a drop of the pus on a lump of sugar follows exactly the same law of similars, the only difference being that it is crude. It is the same old thing, but in a crude manner.

DR. DIEFFENBACH: I have tried the autogenous drugs in gonorrhœal arthritis and gout, and I wish to congratulate Dr. Duncan on his original method of giving it. I took the autogenous product and mixed it with alcohol, while from the doctor's paper to-night it

would seem that the bactericidal effect of the alcohol prevented the formation of the toxin in the blood. In future, when the ordinary methods do not succeed, I will try his method, which seems to be similar to the autogenous method in vogue. Putting it in sugar or sterile water, or ordinary water, appeals to me from the report we have had to-night, while mixing it with alcohol would be liable to give a negative result. We are to be congratulated on having a confrere who has done this original work.

DR. DUNCAN: Dr. Fobes asked whether I had any failures, as some time we learn from our failures. In Case No. VII. the patient made marked improvement in all of his symptoms, although he had a foreign body in the shape of a piece of bent silver wire in his chin. The discharge ceased for three or four days under the action of the vaccine, but it returned.

In another case that is in the hospital at the present time. The patient was brought into the Volunteer Hospital about six months ago suffering with a compound fracture of the right arm, upper third; weight, 145 pounds. He came under my care September 22 last, with the request that a trial be made of autogenous virus by the mouth, as his case appeared to be hopeless. On this date the patient weighed but 99 pounds, he was cachectic, wan and emaciated. He had no appetite and with difficulty could be made to eat the juice of a single orange a day. He wanted to die and would not leave his bed. A close examination of the arm revealed a piece of necrotic bone about three-quarters of an inch long; this was removed and the patient was started on a course of autogenous virus by the mouth. The pus, at first, cleared up quickly, but returned again in seven days. Again putting him on the virus it cleared up again, but came back in a few days. This has seemed to be the case up to the present time. But the patient has gained six pounds, is cheerful, eats well; in fact, yesterday I put him on double house diet, and an extra quart of buttermilk. He has had three pieces of bone removed since coming into the hospital with the one I removed, making four in all. About six weeks ago a small piece of silver wire was removed, so it is possible that in the wound there is still a foreign body.

I have never had a case that I could say was a flat failure.

Replying to the question about dosage—whether one should receive a larger dose than another? The action of this vaccine is homœopathic, some patients require a larger dose than others. We fortify the system against disease by giving our medicines by the mouth. That is, we arouse the antibodies in the serum by internal medication. In the presence of these antibodies in the serum the invading bacteria are more susceptible to the action of the phagocytes.

There are many of our medicines we cannot mix with water,

the chill of the water may kill the bacteria. It is the live bacteria that we are after. It is the live bacteria that are most efficacious. Neither do I believe alcohol is a good menstruum, for many reasons.

We know we obtain good results by triturating our medicines with sugar of milk, and I prefer it to alcohol or any other substance.

THE PHYSIOLOGY OF FATIGUE.*

Demonstration by E. Wallace MacAdam, M. D. Demonstrator of Physiology.

I purpose this evening to give a demonstration of the influence of the circulation of the blood in the production of fatigue. I will start the apparatus, so that it may be working while I explain it.

A frog has been prepared by destroying its brain; the spinal cord has been left uninjured, so that the circulation may be interfered with as little as possible; both sciatic nerves have been exposed and electrodes have been placed upon them, in series, so that they receive simultaneous shocks of induced current, both make and break. The metronome makes and breaks the primary circuit. The gastrocnemius muscle of each leg has been dissected up and each Tendo Achilles attached by a thread to a muscle lever. A firm ligature has been tied around one leg, to cut off the circulation in it. Both levers are of the same length, and both have the same weight to lift. The levers are arranged to write on the drum, which is slowly revolving. Thus you will see that both muscles are working under exactly the same conditions, excepting that one muscle has a circulation that is practically normal, while circulation in the other is inhibited. While the drum speeds on and the muscles are recording their work, I will say something of the physiology of fatigue.

Fatigue is one of the most common symptoms of disease, especially of those diseases characterized by some upset in the chemical metabolism of the body. If your experience is like mine you come upon it constantly. Hardly a day passes that I do not have some kind of a fatigue problem to face. It would therefore seem worth while to present some of the theories of normal fatigue, and if they do not help us to alleviate we may at least be able to understand the condition which presents itself so often for treatment.

Fatigue is a general physiological phenomenon; it is not confined

*Read before Homœopathic Medical Society, County of New York, October, 1910.

to muscle tissue—every organ, every tissue, every cell is subject to it; but the most convenient tissue to study is voluntary muscle, and the gastrocnemius of the frog has given us most of our information.

When a muscle is stimulated repeatedly it becomes “tired,” and in an experiment like this it is marked by a decreasing amplitude of contraction, the lever writing a line shorter and shorter until finally it makes no mark—the muscle has ceased to respond to the stimulus. Where an accurate record is made, we find that fatigue does not come on at once, but that the amplitude of contraction at first increases, that the lever writes a line longer and longer, until a certain maximum is reached, after which it declines. This first gradual increase in contraction is called the “treppe,” the German word for staircase.

The treppe is not peculiar to voluntary muscle; it has been demonstrated in other tissues. Exercise at first stimulates and later depresses. We all know we are able to do more work after a little exercise. We get “warmed up.” Ball players “warm up” before starting their game; they get, then, the stimulating effect of their previous exercise.

The causes of fatigue may be divided into two general phases. There are two phases in all protoplasmic activity, the anabolic phase and the catabolic phase. Muscle protoplasm is subject to the same laws. Certain food materials are taken up by the protoplasm which are essential to its activity (anabolism), and certain waste products are formed (catabolism). Of the substances consumed as foods we know most about two—oxygen and carbohydrate. Both are essential to activity. A muscle deprived of oxygen can do little work; an animal deprived of carbohydrate shows symptoms of profound fatigue. We can understand why guides and mountain climbers eat sugar or chocolate or raisins when their physical powers are taxed to the utmost.

On the catabolic side, we find three substances in the muscle after activity: Carbon dioxide, sarcolactic acid and acid potassium phosphate. Dr. Frederic S. Lee, of Columbia University, injected moderate amounts of each of these acid substances into animals, and found that all three of the substances acted in the same manner—although the animals had done no work, the muscles gave evidence of exhaustion. These chemicals are therefore called “fatigue sub-

stances." It is probable that there are other substances produced normally—the three mentioned are the ones we know most about; but pathologically there are many fatigue substances. One of the most important of the pathological group is β -oxybutyric acid, found in diabetes. We can readily understand why the diabetic shows so many symptoms of weakness and exhaustion; he is not only deprived of the carbohydrate, but the β -oxybutyric acid is present, acting as a fatigue substance upon the muscles. Dr. Lee has also experimented with indol and skatol, and finds these, too, are fatigue substances.

One unexpected result of Lee's experiments led him to his theory of the cause of the *treppe*: when he injected minute quantities of these acid substances, instead of getting the depressing effect, he found a stimulation; injecting very small amounts of acid potassium phosphate into a frog, for instance, he got an increased ability to work. His theory of the *treppe* then is this: that when a muscle contracts a minute quantity of these fatigue substances is produced; this stimulates the muscle so that the next contraction is greater; the acid substances produced by this second contraction are still further stimulating, so that the third is greater than the second, and so on until the substances accumulate in sufficient quantity to produce their depressing effect.

The location of fatigue we do not know. It may be in the muscle, it may be in the central nervous system. The whole matter is open.

Regarding the sensation of muscle soreness, Hough has done some interesting work. He concludes that there are two kinds of muscle soreness—one kind appears shortly after exercise and is dissipated after resting for a few hours; the other comes on the next day after violent exercise, such as horseback riding, and lasts several days. The first kind is undoubtedly due to the fatigue substances; the second seems to be due to actual rupture of the muscle fibre—and now we can understand why after unaccustomed riding we continue for so long to eat our meals standing.

But it is the recovery from fatigue that interests us chiefly. Isolated muscle after being tired, when allowed to rest, becomes capable of more work. The effect of the acid products seems to pass away after a little. If we are able to irrigate the blood vessels the substances are washed away, and the muscle acts more vigorously

than the muscle which has been simply rested. If we inject defibrinated blood through the blood vessels the muscle is nearly as strong as it was originally; here we have not only removed the waste products, but we have supplied to the muscle the food which it must have for its normal metabolism.

In the normal body we may have all three of these factors at work at the same time. When tired a man rests—this alone will help in recovery; but at the same time the blood is circulating through his tired muscles, washing the fatigue substance away from them and bringing to them fresh supplies of carbohydrate and oxygen. If he eats a little sugar the recovery is more rapid.

Weichardt, a German investigator, has gone further than this. He reports that he has isolated a fatigue toxin differing from the substances I have mentioned, which, when injected into an animal, produces fatigue. He claims that by bacteriological methods he has been able to produce an anti-toxin for fatigue, which, injected into tired animals, causes a rapid recovery and when administered to rested animals enables them to perform more work than normally. His work has not been verified by any other physiologist and will not be accepted generally until confirmed.

Massage helps in the recovery from fatigue by increasing the circulation in the tired muscles.

One point that we cannot afford to overlook is that fatigue substances produced in one part of the body may be carried to other parts. When the legs are tired the arms are unable to do their accustomed work. Excessive work of one tissue, then, may cause fatigue of other tissues. We all know that excessive physical work causes mental weariness. The opposite has been demonstrated: mental work will cause muscular fatigue. This is important, because after hard mental labor physical rest may be indicated rather than the muscular work we are apt to recommend to our patients.

Summary:

1. There are two factors in fatigue: (a) consumption of available nutriment; (b) accumulation of certain chemical substances. Recovery is most prompt when both factors are opposed, as is done when the circulation is aided.

2. There are doubtless many chemical substances which may act

as fatigue substances; those that have been demonstrated are: β o-xybutyric acid, indol and skatol.

3. Physical rest may be useful in the treatment of those nervously fatigued.

[*Note:* I wish to acknowledge my indebtedness to Dr. Frédéric S. Lee, Professor of Physiology in Columbia University, for assistance in the preparation of this paper. In addition to personal help from him, I have borrowed largely from his work, especially from "The Nature of Fatigue," *Popular Science Monthly*, Feb., 1910; "The Action of Normal Fatigue Substances on Muscles," *Amer. J. of Physiology*, Oct. 1, 1907, and "The Cause of the Treppe," *Amer. J. of Physiology*, April 1, 1907.]

Demonstration of Record.

It will be seen that the record of one muscle shows a fatigue which came on quickly, while the other record shows a much more gradual loss of power to work. The muscle which presents speedy exhaustion is the one from which the circulation was cut off at the beginning of the experiment; the circulation in the second has been practically normal.

ABSTRACT OF PAPER ON FATIGUE AND SLEEP.

By Fred. W. Eastman, A. B.

Relation of Muscular Exercise to Sleep.

Fatigue products from muscles carried by blood to brain.

Evidence that brain itself produces fatigue products.

Mosso with ergograph found less muscular strength after mental effort.

Shrinkage of nerve cells and changes in staining qualities after day's work.

Direct proof of acidity of grey matter after nervous activity.

Injection of fatigue products into dogs and guinea pigs produces torpor. Same effect on human beings.

Excess of fatigue products retards or prevents the activities of which it is a result.

Examples of excess of other biologic products hindering their own production:—alcohol in its production by yeast from sugar; butyric acid by bacteria from butter; lactic acid by bacteria from sugar of milk.

Indirect evidence that sleep is due to toxic products.

Coma of diabetes. (Loss of nutritive material—sugar—and accumulation of acid waste.)

Coma of malaria. (Toxin.)

Coma of chronic inflammation of kidneys. (Slow removal of waste.)

Sleeping sickness. (Toxin.)

Tendency to inordinate sleep in the chronic fatigue of certain forms of neurasthenia.

Lethargy after meals. (First products of digestion said to be similar in action to fatigue products. Lethargy more likely due to withdrawal of blood from brain.)

Anemia of brain during sleep.

Evidence of:—fontanelles, trephine wounds, balanced table, plethysmograph.

Due (Howell) to fatigue products paralyzing vaso-constrictor center and allowing arteries of trunk to expand and receive blood from head. This center one of the first fatigued because always in tonic activity responding to demands of organs and senses.

Unconsciousness of sleep therefore due to lack of oxygen in centers.

We wake when the vaso-constrictor again becomes sensitive to stimuli and returns the blood to the brain.

Amount of sleep necessary.

Dependent on *amount* of waste products to be removed: therefore greater for physical than mental occupation.

Much evidence that the greatest depth of sleep and most of the cell restoration occur during the first two or three hours of the normal sleep period. We do not wake during the last hours because the conditions of the bedroom do not afford stimuli.

Intensity of sleep, as intensity of muscular movement, to a great extent a matter of personal habit and environment.

Evolutionary tendency to less sleep: lower animals, savages, negroes, forefathers without light, rural districts, human hibernation in Russia.

Resistance to sleep to be developed by same method as resist-

ance to muscular fatigue. Six hours probably sufficient for persons of sedentary occupation.

Rest there must always be, but with increasing cell efficiency it may not have to be of the extreme type we know as sleep.

DISCUSSION.

DR. CHARLES McDOWELL: As the hour is so late and there are other speakers to be heard from, I will say only a very few words with regard to one phase of this subject, and that is with regard to the remedies for fatigue, and the possible antitoxin for fatigue which has been suggested. Dr. Lee is not the first who has looked for a remedy for fatigue. We have all been looking for it for years, and I very much question whether it will ever be found. It is very possible that there is a normal antitoxin in the body, as has been suggested, which antidotes the fatigue products which produce the sensation of fatigue, the athlete becomes able to make prolonged exertions without much fatigue. While that is possibly true, and while it is possible that something may be developed to do that, its application must be very limited. At any rate, I am sure that the remedies sometimes given for exhaustion and fatigue are very dangerous. Nature's remedy, which is natural, has been shown by this experiment and by others in the carrying away of these waste products and the addition of nutriment,—carbohydrate and oxygen. This can only be done by rest, and food, and perhaps massage. A patient comes to a physician and asks for a tonic. There are lots of stimulants—coffee, tea, alcohol, caffeine, theine, and other so-called tonics,—which are supposed to strengthen people, but they cannot remove the fatigue toxin. They may lessen the fatigue sensation, and they do, without question; they lessen the sensation of fatigue, but the exhaustion of the real fatigue is still there—the lack of the carbohydrates and oxygen—just as it was before. We should look upon a muscle not only as a machine, but also as a furnace. Combustion is going on in it, burning up the carbohydrate, and that combustion is liberating the latent energy and converting it into kinetic energy.

Suppose it were possible to relieve the sensation of fatigue. This machine has its limitations, and I believe they are far beyond the fatigue produced. In the case of the human being fatigue in the nerve centers, the spinal cord, and cerebrum will take place long before the muscle has reached its limit, so that to a certain extent it may be safe to lessen it; but the fatigue is the thing that conserves and saves the muscle; it is the safety device, and it is dangerous to remove it. If we remove the sense of fatigue and the person goes on using his brain and nervous system long beyond what he would be permitted to do without the sensation of fatigue

he would the more easily overwork those organs. I believe that many tonics and medicines do lessen the fatigue sensation, and so enable a man to wear himself out a little sooner. If the physicians of our school have had less trouble in that regard—in giving remedies to alleviate pain and by giving tonics—I think our patients have profited just so far as we have not given them. There may be times when tonics and stimulants are valuable, but they are measures which have their dangers, and fatigue is one of nature's forms of preserving the mechanism, just as a safety valve on the boiler is a safeguard to the boiler. Fatigue is felt long before the danger point is reached, and most of us work long after the danger mark is reached. It is well for physicians to watch how far beyond that point their patients can go.

DR. JOHN E. WILSON: I should like to ask two questions, in order to make a practical application. First, have there been any tests in any of this work to test the action of coca in its effect upon fatigue, its diminution of this curve, and has there been any explanation of its action as to whether it is an antitoxin or a chemical antidote? There is no doubt, I think, that the South American Indians have used coca for a long time—we have known about it for a century—with the effect of practically abolishing fatigue to a certain extent. They retain their vigor, and do not die from any startling consequences.

Second: After persons in ordinary health become exceedingly fatigued they may become sleepless. If a person becomes very much exhausted and neurasthenic, insomnia may result. Are their peripheral nerves in a hyperæsthetic state on account of their exhaustion?

DR. MACADAM: I cannot answer either question (replying to Dr. Wilson), and will leave the reply to Mr. Eastman, who has spent more time upon it than I. The matter of testing the value of coca had not occurred to me.

MR. EASTMAN: I have had some experience with coca. It is supposed to stimulate the action and so get better action—producing a greater activity of the muscle for a time, though the final result is the same as that of alcohol—an after effect that is not particularly good.

DR. WILSON: Is not that the drug that Dr. Weir Mitchell said he knew about but would not exploit for fear of the possible injury to the human race?

MR. EASTMAN: I did not know that. I think Hough made some experiments in regard to the amount of fatigue products sleeping or awake. With extreme muscular exertion you get collapse; if the action is regular you get fatigue.

He explains that the extreme effect of fatigue products is this irritable weakness—that the effect is extremely irritating perhaps

because of their acid character. He is the only authority I can quote.

DR. MOFFAT: I had a patient who took coca for twenty years. He always went to extremes in everything, and for twenty years he chewed the leaves, and tried to make his family do the same. I watched him very carefully to note if there was any bad effect and never found any. I have used coca, fifteen drops three times a day, and have been doing that for twenty years, and have never satisfied myself that I had any coca habit.

NEW YORK HOMŒOPATHIC MATERIA MEDICA SOCIETY.

Meeting held October 26, 1910.

The paper of the evening was by Prof. R. F. Rabe. A full discussion by those present took place after its reading.

A synopsis of Dr. Rabe's paper follows:

CLINICAL EXPERIENCES WITH UNUSUAL REMEDIES.

By R. P. Rabe, M. D., Professor of Materia Medica.

Abies nigra: Sensation of hard-boiled egg in stomach.

Abrotanum: Emaciation begins in feet, the opposite of *Natrum mur.*, which begins in neck. Endocarditis with pains about heart.

Acetic acid: Anæmia, dropsy, gastric disturbance, great thirst.

Agaricus muscarius: Twitching and inco-ordination of various groups of muscles.

Actea spicata: Rheumatism of small joints of fingers.

Alumen: Chronic pharyngeal catarrh with burning, constriction and dryness.

Ammonium carb.: Pulmonary œdema, worse 2 A. M., with relief after expectoration.

Amyl nitrite 30: Climacteric flushings and palpitation.

Antimonium sulphuratum: Chronic bronchitis, with relief after expectoration.

Antimonium iodide: Slow resolution after pneumonia, with jaundice.

Aralia racemosa: Bronchitis, loose cough.

Aranea (spider): Wet weather aggravation.

Arum: Loose cough, worse lying down.

Artemisia: Hay fever from hay.

Arundo: Hay fever, with tickling in roof of mouth and nostrils.

Badiaga: Neuralgia, worse when thinking of it. Cough, with flying expectoration.

Bellis: Soreness through abdomen from exposure to cold and wet.

Calc. arsen.: Organic disease of heart, palpitation from mental emotion.

Calc. sulph.: Suppuration, better in open air; opposite of *Hepar*, which is better when warm.

Carbolic acid: Headache, band around head; very offensive nasal catarrh.

Carbon. sulph.: Numbness.

Ceanothus: Enlarged spleen, with pain in it.

Chenopodium: Pain in spine.

Chimaphila: Thick urine, ropy; sensation of ball in perineum.

Chin. ars.: Diarrhœa from eggs.

Chloral hydrate: Erythema, like scarlet fever.

Coccus cacti: Whooping cough, later stages, worse 5 A. M. and 11 P. M.; relief from cold water; open air relieves.

Cochlearia: Gonorrhœa, burning within fossa.

Codeine 3x: Dry, hacking, irritating cough; worse lying down.

Comocladia: Pain in eyes.

Conium: Impotency or too early emission. Women with ungratified sexual feelings. Dry spot in throat, causes cough.

Corallium: Cold mucus in catarrh.

Condurango: Cures deep fissures in mouth. Spasmodic stricture of œsophagus.

Crotalus: Cancer of liver, with pain; greenish color; abdomen tender.

Crocus sativa: Sensation of something alive in abdomen.

Cypripedium: Sleeplessness of children

Dioscorea: Colic of catarrhal appendicitis; patient doubles back; cramps in distant parts.

Dolichos: Itching of skin without eruption.

Echinacea θ: Intense debility in infected wounds.

Elaps: Offensive otorrhœa; greenish post-nasal catarrh.

Equisetum: Nocturnal enuresis.

Eupatorium perfoliatum: Intermittent fever; worse from cold drinks. Vesical irritation in women.

Fagopyrum: Eruption from primrose plant; is relieved by cold water. Occipital headache.

Ferrum iod.: Bearing down feeling; sitting makes worse.

Formic acid: Rheumatic pains wander about; sweat with no relief.

Gnaphalium: Sciatica, relieved by sitting; worse in any other position.

Grindelia: Asthma when dropping asleep.

Hekla: Enlarged glands; bony tumors.

Helonias: Itching of vulva.

Hura: Cracking of knees on bending.

Hydrocotyle 6x: Ichthyosis; sebaceous tumors.

Hypericum: Punctured wounds, with pains along nerve trunks. Pessary pains.

Jacaranda: Chancres very red.

Lac caninum: Sore throat; begins one side and goes to other. Fullness of breasts before menses. Pearly white membrane in diphtheria, alternating sides. To dry up milk supply.

Lachnantes: Stiff neck from drafts.

Lactic acid: Diabetis with nausea; relieved by eating.

Lathyrus 30: Paralysis of extensor muscles from getting wet.

Lactrodectus: Angina pectoris, intense pains.

Lithium carb.: Palpitation from emotion.

Malandrinum: Prophylaxis of small-pox.

Melilotus: Headache with flushed face; nose-bleed relieves.

Medorrhinum: Suppressed gonorrhœa; even gonorrhœal peritonitis.

Millefolium: Bright red hæmoptysis, without anxiety.

Myrica: Functional disturbance of liver and heart; soreness; worse in evening, better in open air.

Osmium: Renal colic, with vomiting.

Onosmodium: Neurasthenia from sexual excess or eye-strain.

Pæonia: Anus oozes and itches.

Penthorum: Coryza; constant wetness in nose.

Ptelea: Functional disturbance of liver; swelling, aching and weight, on lying on left side; irritable.

Pyrogen: Septic cases; pale, sweaty, rapid pulse, low temperature or vice versa, with anxiety.

Ranunculus sceleratus: Mapped tongue; myalgia right side.

Rhaphanis: Occlusion of bowel from cancer; no gas up or down.

Ratanhia: Fissures of anus.

Robinia: Catarrhal gastritis; vomiting excessively acid.

Sanicula: Profuse sweats about head and neck; pasty stools; sensitive to drafts.

Sticta: Cough dry, worse morning and evening. Dry clinkers in nose; chronic catarrh.

Tarantula Cubensis 30: Septic conditions; carbuncle bluish in color.

Tilia: Pelvic peritonitis; warm sweat does not relieve.

Trillium: Hæmorrhage from fibroids.

Trombidium: Diarrhœa with brown grain-like stools; worse after eating or drinking.

Tuberculinum 200: Deep acting. Worse in damp weather; wants cold air blowing on him. Incipient tuberculosis. In phthisis cannot eat.

Variolinum: Prophylaxis of small-pox. Cures small-pox.

Veratrum viride: High fever, high pulse, red streak on tongue; phlebitis.

Viburnum: Delayed menses; feel like they would come; cramps when they do.

Viscum: Failing heart; worse lying left side.

Wyethia: Nasal catarrh, itching far back and dry; constant desire to swallow.

Xanthoxylum: Dysmenorrhœa, with cramps down front of thighs.

AN INFORMAL DISCUSSION AT ROCHESTER.

An informal meeting of those interested in the homœopathic medical colleges in the State of New York was held at the semi-annual meeting of the Homœopathic Medical Society of the State of New York in Rochester on Tuesday, September 13th. Owing to the prolonged medical discussion during the evening session it was very late when the scientific meeting adjourned, so that the college meeting could be held. In the absence of Dean Copeland the meeting was called to order by the chairman of the college committee of the New York Homœopathic Medical College and Flower Hospital, Dr. Herbert D. Schenck.

Dr. Schenck said that the colleges desired to make a report to homœopathic physicians of the State, not only of the condition of the colleges and the work they were doing, but they desired to have an expression from the profession as to the quality of that work and wherein it might be made very effective and practical to meet the present-day requirements of medical students.

Dr. Schenck explained the necessary absence of Dean Copeland, which every one greatly regretted. Then Prof. John E. Wilson made a statement on behalf of the faculty of the work done in our college, and stated the feeling that they wanted to make it as broad, catholic and effective as they could, not forgetting that this is a homœopathic college and that homœopathy must be the corner-stone on which the institution's right to exist rests.

Dr. Walter G. Crump, the executive officer of the Alumni Association, then made an address emphasizing the necessity for the homœopathic physicians to be alive in their duties towards the colleges in getting students and enabling the faculty of our schools in New York to turn out large classes of well-equipped graduates to advance the cause of homœopathy in this State. He noted the wide demand for homœopathic physicians from almost every quarter and expressed a feeling that there were a great many young men and young women who had sufficient academic counts to enable them at once to enter upon the study of medicine. Many of these young graduates of the high schools of New York had as high as seventy or more regents' counts, where sixty are the requirement for entrance to our medical colleges. Many of these boys and girls have not had their attention called to the fact that they were fully equipped to enter upon the study of medicine nor had they had presented to them the value, worth and character of the physician's work. Many of them have not yet determined upon a career, either in business or professional life, and were working at employments and trades that were far beneath their ability. He mentioned as having come across several such young people right in the vicinity of Rochester.

Dr. Lee also urged upon the profession the necessity of hearty and enthusiastic support of our medical colleges if we were to do what we ought for homœopathy.

Other short addresses were made by alumni and others. Dr. Jennie H. Baker responded briefly for the Homœopathic Medical College and Hospital for Women.

Refreshments were served by the Alumni Association to those present.

The meeting adjourned, after what seemed to be a helpful meeting.

Many questions concerning the college students and its faculty were asked the chairman after the meeting, which showed an interest among the alumni and other homœopathic physicians in New York State that was reassuring and gratifying to every alumnus of the New York College.

HERBERT D. SCHENCK, M. D.

WARD'S ISLAND METROPOLITAN HOSPITAL ALUMNI.

The alumni meeting and dinner of the Ward's Island Metropolitan Hospital Alumni Association will take place at the Hotel Manhattan, Madison avenue and 42d street, on the evening of Wednesday, December 7th.

DEAN COPELAND REAPPOINTED.

At the university convocation held in Albany, October 27-29, Dr. Royal S. Copeland was reappointed as a member of the Medical Council to serve for five years.

EDITORIAL

IMPROVEMENTS IN THE COLLEGE AND HOSPITAL EQUIPMENT.

The projected improvements in the college equipment are well under way. The new bacteriological laboratory will have ample floor space and will be exceedingly well lighted. This is the most important change, as when completed it will form one of the most complete laboratories for bacteriological study and research that can be made.

One of the small buildings in the yard is being equipped for an isolating ward. Contagious diseases are not admitted knowingly, because the city makes other provision for such cases, but it sometimes happens that a contagion develops unexpectedly, and heretofore a room in the hospital proper has had to be hastily prepared for it. With an isolating ward in a separate building any such case can be better taken care of, and risk of infecting other patients will be avoided.

An unused part of the ambulance building is being fitted up as a dormitory for male employees. This will give more room for other purposes.

Changes are also being made in a part of the college building, the first floor, making better facilities for some of the out-door clinics.

New and larger boilers for heating and power are being placed while the other work is in progress. The institution has outgrown the original plant.

The grounds about the college and hospital are being put in order and made attractive through the munificence of two of the trustees, Mr. Edward Y. Weber and Mr. Henry L. Langhaar.

MEDICAL DEPARTMENT OF COLUMBIA UNIVERSITY WANTS A HOSPITAL.

In his annual report to President Butler, Dr. Samuel W. Lambert, dean of the College of Physicians and Surgeons—the medical department of Columbia University—says this:

“The salient weakness of the New York city organizations is the absolute lack of every New York school to control its hospital

clinical facilities. This state of affairs has been appreciated by this college for some time, and that this inherent weakness in the hospital organization of this school's equipment should have been pointed out and so emphatically criticised by an outside lay observer should stimulate the school to correct its shortcomings."

Dr. Lambert was evidently spurred on by the Flexner report on medical colleges. He wants a hospital now.

There is one error in Dr. Lambert's report, however. There are two medical schools in New York with their own hospitals. The Women's Medical College (homœopathic), which has had its own hospital for several years, is one. The second is the New York Homœopathic Medical College and Flower Hospital, which has owned and controlled its own hospital since 1889, twenty-one years.

THE HOSPITAL OF THE ROCKEFELLER INSTITUTE FOR MEDICAL RESEARCH.

The new hospital of the Rockefeller Institute for Medical Research was formally opened October 18. It is quite complete in every detail and a model, so far as equipment is concerned. The purpose of the hospital is unique. It is to treat, free of charge, only such cases as its management see fit to treat. For the present it is proposed to accept patients suffering from pneumonia, heart disease, and anterior poliomyelitis; nothing else. It remains to be seen what the results will be.

WORK AT THE FLOWER HOSPITAL FOR THE MONTH OF OCTOBER, 1910

Number of ambulance calls,	543
Number of patients treated in emergency room,	605
Number of surgical cases admitted to hospital,	282
Number of medical cases admitted to hospital,	98
Number of maternity cases admitted to hospital,	10
Number of cases treated in the out-door department,	3,682

THE OBSTETRIC CLINIC.

During the month of October Prof. Danforth was able to show the class some interesting and unusual cases in the obstetric clinic. There was one high forceps operation for pelvic contraction (simple

flat pelvis). There were three cases of eclampsia; two were terminated by podalic version, one by forceps. Delivery in all of the above cases was witnessed by the Senior class. There were also two cases of placenta praevia that were delivered by version.

THE SOUTHERN HOMŒOPATHIC MEDICAL ASSOCIATION.

The Southern Homœopathic Medical Association will meet in Jacksonville, Florida, December 6, 7 and 8, 1910. Dr. H. R. Stout, of Jacksonville, is chairman of the local committee. The officers are: Wm. A. Boies, M. D., Knoxville, Tenn., president; W. W. Osgood, M. D., Mobile, Ala., first vice president; A. N. Pierce, M. D., Lake Charles, La., second vice president; John T. Crebbin, M. D., New Orleans, La., secretary; W. L. McCreary, M. D., Knoxville, Tenn., treasurer.

Prof. John E. Wilson and Prof. Rudolph F. Rabe, of the faculty of the college, are both scheduled to read papers at Jacksonville.

Dean Copeland was one of the speakers at the New York City Budget Exhibit on October 14. The meeting of that day was devoted to the Department of Public Charities. The other speakers were Commissioner Drummond and Former Commissioner Hebbard, who is now secretary of the State Board of Charities.

Miss Jeanette McDonald, a graduate of the Post-Graduate Hospital Training School, has been appointed assistant superintendent of the Flower Hospital Training School for Nurses.

OBITUARIES.

Dr. William S. Searle, of Brooklyn, died October 30, at the age of 77 years. Dr. Searle was a graduate of Hamilton College and of the Medical Department of the University of Pennsylvania, class of 1859. He became identified with the homœopathic branch of the profession early in his professional career. From 1868 till 1871 Dr. Searle was treasurer of the Homœopathic Medical Society of the State of New York. For many years he was active in the affairs of the Cumberland Street Hospital, the Homœopathic Hospital of Brooklyn. Dr. Searle contributed many valuable papers to

medical literature, and enjoyed a large, general and consulting practice in medicine.

Dr. Searle was one of the first physicians in this country to advocate improvement in medical teaching. Through his influence, very largely, the homœopathic profession of New York State was active in getting a State Board of Medical Examiners, the first State to make such legislation. Dr. Searle was one of the original members of the first State Board of Medical Examiners in 1893 and was several times reappointed, so that he served continuously until his death.

Dr. Searle was a man of great intellectual attainments, and of broad mind. His death removes one of the oldest and most respected members of the homœopathic profession.

Dr. Walter E. Delabarre, '91, died at his home in White Plains, New York, October 30, at the age of 54 years. He was also a graduate of Brown University. Dr. Delabarre had an office in New York City from his graduation until his death.

Dr. Henry James Coleman, '61, died at his home in Lorman, Mississippi, January 16, 1910.

ALUMNI NOTES.

Dr. Joseph H. Fobes, '01, has removed to 1 West 68th street, New York. Telephone, Columbus 4438.

Dr. F. S. Jameson, '06, formerly of Mt. Upton, N. Y., has removed to 8 W. 19th St., Whitestone, L. I.

Dr. Charles S. Macy, '81, has removed to 26 West 97th Street. Hours: 10 to 12 A. M. and 5:30 to 6:30 P. M. Sundays by appointment. Telephone, 8794 Riverside.

Dr. J. T. Simonson, '91, has resumed practice. Office hours: Week days, 11 A. M. to 12:30 P. M.; Sundays, 9:30 to 10:30 A. M. Evenings by appointment. Telephone, Riverside 1204.

A smoker for the Freshmen was held at the home of Dr. M. W. McDuffie on the evening of October 6. The Freshmen, and some others, were present. Music and other entertainment was furnished by a quartette of colored men. Refreshments were served. Everybody had a good time.

Dr. Henry B. Dorr, '09, announces that he has instituted a

medium priced hotel-sanitarium at Ocean Grove, N. J., where patients will be received on application to him at Mulford Villa, Ocean Grove, N. J. This resort has an excellent winter climate, being four degrees warmer than the coldest days at Lakewood.

Dr. Orlando R. von Bonnewitz has removed to the Ormonde, Broadway and Seventieth Street, New York. Diseases of the rectum exclusively.

Albany Notes.

The Albany County Homœopathic Medical Society held the October meeting on Friday, Oct. 14th, Dr. Crawford R. Green in the chair, at the Hampton Hotel, Albany, New York. The annual supper was enjoyed by twenty-five members. Afterwards Dean Copeland made an interesting and enthusiastic address upon "The Present Status of Homœopathy."

At the last meeting of the staff of the new Albany Homœopathic Hospital, Dr. J. I. Dowling, '95, was elected chief of staff. The new hospital is a model institution and redounds to the honor of our profession.

E. S. Coburn, '64, of Troy, an ex-president of the State Society of New York, died in September after a lingering illness.

Dr. C. R. Green, '09, has opened an office in the Pine Hills section of Albany.

Dr. Stork recently called at the establishment of B. E. Marshall, '99, of Albany, and left a very fine boy.

CRAWFORD R. GREEN, '06, Troy, New York.

Brooklyn Notes.

Dr. Wm. H. McLenathen, '78, is visiting his son in New Mexico. During his absence his patients are referred to Dr. Robert L. Wood.

Dr. and Mrs. Herbert D. Schenck celebrated their silver wedding anniversary on October 14th. A number of the Brooklyn members of the profession, who were present at their "at home" on that date, presented the doctor with a silver coffee service.

We recently saw "Lew" Clapp, '04, driving a runabout with an air of business. This is all we have seen of him since graduation.

At the October meeting of the County Society Dr. F. E. W.

Hopke read a paper in which he advocated the personal bacteriological examination of suspicious exudates in naso-pharyngeal diseases, by the physician himself, or a competent bacteriologist, before calling in the board of health, thereby saving time and lessening the elements of uncertainty when such work is done by the board. Dr. Henry E. Highby, in discussion, advocated the direct method of examination—smear, fix by heat, stain and examine—instead of culture tubes and incubation, its very simple technique recommending it to the practitioner.

MARRIED.—On October 26th, at Milton-on-Hudson, N. Y., Miss Edith Ball to Dr. Harold A. Sanders, '05. At home at 864 St. John's Place, after December 1st.

Dr. J. Lopez Cardozo has been elected a life member of the Brooklyn E. D. Homœopathic Dispensary Association for long and faithful service.

Brooklyn homœopaths, by invitation of the Medical Society of the County of Kings, united in honoring Dr. William J. Mayo, at a dinner on October 19th, Dr. Henry B. Minton and Dr. W. W. Blackman serving on the committee of arrangements. On the previous evening Dr. Mayo spoke to the profession on some of the principles underlying surgery of the stomach and duodenum before an audience who packed the auditorium of the Medical Library building. His absolute simplicity of manner, wholly free from egotism, as well as the forceful and lucid rendering of his theme, made a profound impression on his hearers.

Dr. William Lathrop Love, '94, announces the removal of his office and residence to 857 Lincoln Place. Office hours, 8 to 9:30 A. M., 12 to 1:30 and 6 to 7:30 P. M. No evening hours Sundays and Wednesdays. Sundays, 8 to 10:30 A. M. only. Especial appointments for X-ray examinations and dermatological consultations. Telephone, 1887 Bedford.

Senior Class Notes.

Three years ago a Freshman class, numbering but thirteen, entered college, the smallest class in the history of the institution for a number of years. This year, as Seniors, the class still bears the same distinction, although its number has been increased. Our position in the history of the institution is unique. Entering at a time

when general interest in the college was at its lowest ebb, we have been able, as students, to see the place permeated with a spirit of united interest and enthusiasm. And so, although the smallest of the four classes, we feel ourselves capable of undertaking the obligations of the Senior class, to preserve for the future classes the dignity, reputation, and traditions of the college. There is no class which feels more strongly for the welfare of its Alma Mater, or would do more to have this college the world center for Homœopathy.

The officers of the Senior class are as follows: President, W. S. Gregory; Vice-President, A. L. Ivins; Secretary-Treasurer, I. L. Farr; Senators, H. L. Baer, P. J. Schmahl; Historian, I. L. Farr.

Junior Class Notes.

All the members of the Junior class have returned to college with the exception of E. B. Stedman, who is expected to report shortly. The new members are S. M. Robinson, ex-'11; J. B. Hallam, Temple University, Philadelphia; D. O. Lyons, College of Physicians and Surgeons, Columbia University; C. W. Broadhead, Bellevue Medical College, and S. Weingradt, New York Eclectic Medical College.

The class officers and Junior "Prom." Committee have not yet been chosen.

Sophomore Class Notes.

The Sophomore class began the year with all the old members back except three, who were dropped by the wayside, and the class regrets very much this loss.

A. Macpherson, Yale, who had to leave college last year because of appendicitis, will not return to college this year. He has turned hunter and trapper, and expects to stay in the Adirondacks all winter.

Steven Cottley is doing very well in Chicago. Both expect to come back to college next year.

We have acquired several new members, so that now the Sophomore class is the largest in the college. We are very glad to have with us Mr. Myers, who studied last year at the Albany Medical College, and Mr. Huntington, from Dartmouth.

At a recent class meeting the following officers were elected: E. Leslie Burwell, President; Robert W. Whitmarsh, Vice-President; Harold M. French, Secretary; Albert Comstock, Treasurer; Douglas S. Murphy, Franklin B. Pedrick, Senators.

Freshman Class Notes.

Officers of the Freshman class have been elected as follows: President, Thos. Hart; Vice-President, Buckmaster; Secretary-Treasurer, Theodore Gade; Historian, D. Baker.

FEATURES IN THIS NUMBER OF THE CHIRONIAN.

The article by Dr. Duncan in this issue is one that will repay careful study by every reader. It is intensely interesting, and, if confirmed by other observers, will prove far-reaching in its effect. The CHIRONIAN will be glad to receive and publish further observations along this line from any one who tries the methods outlined by Dr. Duncan.

Attention is also directed to the papers on "Fatigue," by Dr. MacAdam and Mr. Eastman.

ROENTGEN RAY DIAGNOSIS OF DISEASES OF BONES.

Prof. W. H. Dieffenbach has just issued a reprint with the above title from the *American Quarterly of Roentgenology*. Prof. Dieffenbach read his paper at the 1909 session of the American Roentgen Ray Society. It gives the outline of the results of ten years' original investigation of bone lesions with the X-ray. Among the conditions mentioned are chondroma, osteitis, osteo-mylitis, osteo-malacia, fragilitas, ossium, bone cysts, osteoma, osteo-sarcoma, syphilitic bone lesions, tubercular bone lesions, and gonorrhœal bone lesions. Dr. Dieffenbach is a pioneer in this work, and all of his paper is original and new. It is a great step forward in the diagnosis of bone disease, and one that is destined to be of profound benefit to the profession when generally known.